



## System Overview

The IMS Series Emergency Lighting Inverter from IEP Systems is designed to provide 120V or 277V 60 hz power to emergency and other critical loads in the event of a power failure or brownout situation.

The line voltage output allows the remote fixtures to be located up to 2000 feet from the unit.

Each system is supplied with field wiring options for ease of installation.

IMS Series inverter employs sealed, maintenance-free\* VRLA batteries with a design life of 10 years per battery manufacturer guidelines.

Product is tested and listed to UL924

\*VRLA do not need to be watered. Periodic checks, coupled with standard record keeping and maintenance of the inverter would ensure the longevity of the battery module.

## Operating Parameters

Operating temperature: 32F (0C) – 104F (40C)

Running Time: minimum 90 minutes

Power Factor: .9 leading to .9 lagging

Inverter efficiency: >85%

Housing: Heavy duty steel construction finished in white powder coat paint

\*We recommend that only Energy Star recognized compact fluorescent or LED lamps be used with this equipment.

IMS design will provide full rated VA output from .9 leading to .9 lagging power factor. Loads outside of this power factor will reduce the total output of the unit depending on the va at that power factor.

Catalog #
Date:
Prepared By:
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## Theory of Operation

The IMS inverter can be operated in three different configurations.

1. Normally Off; The connected loads will only come on when the utility power fails or during test mode.
2. Normally On: The connected loads will always be on. During power failure, the connected load will automatically transfer to inverter power and remains on
3. Switched/On: The connected loads may be controlled by local switching and can be turned on and off depending on the state of the local switch. In the event of a power failure, the connected loads automatically switch to inverter power and bypasses the local switch and turns the lights on.

## Applications

The IMS will operate incandescent, fluorescent and LED lamps with power factor greater than .9

Self ballasted compact fluorescent and replacement LED lamps may be used but the lamp load should have a power factor of .9 or greater.

Lower power factors lamps result in decreased load output capability.

## Order Information

IMS	—	120V or 277V	—	120V or 277V
IMS Series		Capacity		AC Input
Pure Sine Wave		150W    400W		AC Output
Lighting Inverter		200W    600W		
		300W		

## Suggested Specification

Furnish and install IEP Systems' Emergency Lighting System known as IMS Series with rated capacity of 600 watts. The system shall be listed to UL 924 standard.

Equipment and accessories furnished under the term of this specification shall be the standard product of a single manufacturer and shall be equal in all respects to those supplied by IEP Systems. Catalog numbers and model designations which herein indicate design, quality and the type of materials as well as required operating characteristics. All equipment shall be in compliance with applicable standards and codes.

The connected loads shall be powered normally by utility input and upon failure of the utility power, the load shall automatically be powered by IMS Series Inverter's battery and inverter for a minimum of 90 minutes. Upon restoration of utility power, the system will automatically reconnect the load to the utility power and recharge the battery.

The IMS Series Inverter will be capable of powering any combination of incandescent, fluorescent, and LED loads. The combined load on the system cannot exceed the rated power rating.

The IMS Series Inverter will automatically revert to emergency inverter operation in the event the average utility AC voltage fall below 85% of the nominal line voltage.

During emergency operation, output voltage will be within +/- 5% of nominal at full load for the entire duration of the specific discharge period.

During emergency operation, the system will be powered by sealed, recombination batteries. The batteries will be encased in a high impact, heat resistant container with a permanently sealed cover. The battery will have a minimum design service life of no less than 10 years.

A low voltage disconnect circuit designed to reduce battery discharge during extended power outages and will disconnect the inverter when the battery voltage drops below acceptable level.

The system will have a manual testing switch for manual testing, AC on, Charging and Emergency power pilot lights for system status.

## Dimensions

System Dimensions	W	H	D
A	22.75"	8.75"	6"
B	23"	12"	9"
C	23"	18"	9"

